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**CLAIMS:**

What is claimed is:

1  1.   A method for managing a cache in a distributed
2  caching environment, the method comprising:
3       receiving a cache notification event from a sending
4  device, wherein the cache notification event includes
5  time relative information and a clock value for the
6  sending device;
7       determining a clock delta by determining a
8  difference between the local clock and the clock value of
9  the sending device; and
10      adjusting the time relative information in the cache
11  notification event based upon the clock delta.

1  2.   The method of claim 1, further comprising:
2       validating the cache notification event.

1  3.   The method of claim 2, further comprising:
2       discarding the cache notification event if the cache
3  notification event is invalid.

1  4.   The method of claim 1, wherein the cache
2  notification event is one of an add event, an update
3  event, and an invalidation event.

1  5.   The method of claim 1, wherein the time relative
2  information is an expiration value.

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1  6.    The method of claim 5, wherein the expiration value
2  is one of a discrete time and an amount of time relative
3  to a created time.


1  7.    An apparatus for managing a cache in a distributed
2  caching environment, the apparatus comprising:
3         means for receiving a cache notification event from
4  a sending device, wherein the cache notification event
5  includes time relative information and a clock value for
6  the sending device;
7         means for determining a clock delta by determining a
8  difference between the local clock and the clock value of
9  the sending device; and
10        means for adjusting the time relative information in
11 the cache notification event based upon the clock delta.


1  8.    The apparatus of claim 7, further comprising:
2         means for validating the cache notification event.


1  9.    The apparatus of claim 8, further comprising:
2         means for discarding the cache notification event if
3  the cache notification event is invalid.


1  10.   The apparatus of claim 7, wherein the cache
2  notification event is one of an add event, an update
3  event, and an invalidation event.


1  11.   The apparatus of claim 7, wherein the time relative
2  information is an expiration value.

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1  12.  The apparatus of claim 11, wherein the expiration
2  value is one of a discrete time and an amount of time
3  relative to a created time.

1  13.  A cache component, in a server device, for managing
2  a cache in a distributed caching environment, the cache
3  component comprising:
4       a core cache that stores cache entries; and
5       a cache auditor that performs operations on entries
6  in the core cache,
7       wherein the cache auditor receives a cache
8  notification event from a sending device, wherein the
9  cache notification event includes time relative
10  information and a clock value for the sending device;
11  determines a clock delta by determining a difference
12  between the local clock and the clock value of the
13  sending device; and adjusts the time relative information
14  in the cache notification event based upon the clock
15  delta.

1  14.  The cache component of claim 13, wherein the cache
2  auditor validates the cache notification event.

1  15.  The cache component of claim 14, wherein the cache
2  auditor discards the cache notification event if the
3  cache notification event is invalid.

1  16.  The cache component of claim 13, wherein the cache
2  notification event is one of an add event, an update
3  event, and an invalidation event.

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1  17.  The cache component of claim 13, wherein the time
2  relative information is an expiration value.

1  18.  The cache component of claim 17, wherein the
2  expiration value is one of a discrete time and an amount
3  of time relative to a created time.

1  19.  A computer program product, in a computer readable
2  medium, for managing a cache in a distributed caching
3  environment, the computer program product comprising:
4      instructions for receiving a cache notification
5  event from a sending device, wherein the cache
6  notification event includes time relative information and
7  a clock value for the sending device;
8      instructions for determining a clock delta by
9  determining a difference between the local clock and the
10  clock value of the sending device; and
11      instructions for adjusting the time relative
12  information in the cache notification event based upon
13  the clock delta.

1  20.  The computer program product of claim 19, wherein
2  the time relative information is an expiration value.